

MEMORANDUM OF UNDERSTANDING
HARFORD COMMUNITY COLLEGE & TOWSON UNIVERSITY
DECEMBER 8, 2017

GEOLOGY B.S. Degree

Harford Community College, Bel Air, Maryland, and Towson University, agree to follow the articulation of courses outlined in the articulation (course equivalency) document, for completion of requirements for the Bachelor of Science degree in Geology (Attachment A), which is attached to, and incorporated by reference into, this Memorandum of Understanding (MOU). The following principles guide the operation of this MOU, with the requirements for transfer in specific curricula set forth in Attachment A.

1. Towson University will accept a maximum number of 64 credits from Harford Community College as outlined in the Attachment A. The number of transferable credits specific to this program is reflected in Attachment A.
2. Students who have completed the Associate of Arts Degree in the General Studies program at Harford Community College may transfer into Towson University's Geology program with junior standing provided that the student has completed all courses identified on Attachment A (which is attached to, and incorporated by reference into, this MOU) with a cumulative GPA of 2.00 or higher. Courses completed at Harford Community College with 300 or 400 level Towson University course equivalencies will transfer as lower-level credit but will satisfy course content as indicated.
3. Only courses in which a grade of C (2.00) or better is earned will apply toward the major at Towson University.
4. In accordance with the MHEC transfer policy pertaining to general education requirements, Towson University will accept the completion of Harford Community College's general education requirements (GenEds) and students will be required to complete courses at Towson University to satisfy the remaining *University Core* requirements as shown in Attachment A.
5. Towson University recognizes college-level experiential learning gained through previous work, military and/or volunteer service or life experience. Credit for prior learning may also be established through course challenge or standardized credit by examination.
6. Harford Community College students transferring to Towson University will be given every consideration for financial aid and will be eligible to compete for academic scholarships upon entrance to Towson University subject to stated scholarship deadlines.
7. Both Harford Community College and Towson University agree to work together to facilitate the transfer of students from Harford Community College to Towson University to work cooperatively to insure the high quality of the programs at the respective

institutions. Transfer of students will be in accordance with policies and procedures of both institutions, as they may be amended from time to time.

8. This MOU will be in effect initially for ten years, beginning *fall 2017*, with a review every two years by both parties. Any revisions the parties deem necessary must be evidenced in writing and signed by the authorized officials of each institution. The MOU may be terminated by either party for due cause and after adequate notice of not less than six months is given to the other party.
9. Towson University will establish procedures to provide information on the academic progress of Harford Community College students enrolled as part of this MOU.
10. This MOU, when signed, constitutes the entire agreement between the parties and supersedes all prior agreements and understandings between the parties respecting the matter hereof.

HARFORD COMMUNITY COLLEGE AND TOWSON UNIVERSITY



Dr. Steven Thomas
Vice President for
Academic Affairs

Date 1.4.2018



Dr. Timothy Chandler
Provost and Vice-President for
Academic Affairs

Date 1/16/18

HARFORD COMMUNITY COLLEGE – GENERAL STUDIES A.A. DEGREE
TOWSON UNIVERSITY/ GEOLOGY B.S. DEGREE

HARFORD COMMUNITY COLLEGE			TOWSON UNIVERSITY			
COURSE #	COURSE TITLE	CRS.	TU EQUIVALENCY	CORE	COMMENTS	COURSE ID#
ENG 101	ENGLISH COMPOSITION (GE) (grade of C or better)	3	TSEM 102 (waived)	1.	Towson Seminar	13192
MATH 109 OR MATH 203 *	PRE-CALCULUS MATHEMATICS (GM) CALCULUS I (GM)	4	ENGL 102 MATH 119 MATH 273	2. 3.	English Composition Mathematics	2348 4381 4407
CMST 101	SPEECH FUNDAMENTALS (GI)	3	COMM 131	4.	Creativity & Creative Development	13370
GH **	ARTS & HUMANITIES ELECTIVE (GH)	3	DEPENDS ON CHOICE	5.	Arts & Humanities	
GB **	BEHAVIORAL/SOCIAL SCIENCE ELECTIVE (GB)	3	DEPENDS ON CHOICE	6.	Social & Behavioral Sciences	
CHEM 111**	GENERAL CHEMISTRY I (GL)	4	CHEM 131/L	7.	Biological & Physical Science w/Lab	13097/13098
PHYS 101 OR PHYS 203 and PHYS 200**	INTRODUCTORY PHYSICS I (GI) GEN PHYS: MECHANICS & PARTICLE DYNAMICS (GS) and GENERAL PHYSICS LAB (GL)	4	PHYS 211 PHYS 241	8.	Biological & Physical Science	6800 6805
GB **	BEHAVIORAL/SOCIAL SCIENCE ELECTIVE (GB)	3	DEPENDS ON CHOICE	9.	Advanced Writing Seminar	
HLTH ELECT **	HEALTH GENERAL EDUCATION ELECTIVE (GI)	3	DEPENDS ON CHOICE	10.	Metropolitan Perspectives	
HIST ELECT **	HISTORY ELECTIVE (GB)	3	DEPENDS ON CHOICE	11.	The United States as a Nation	
ENG 102 ***	ENGLISH COMPOSITION AND LITERATURE	3	ENGL TLL	12.	Global Perspectives	
GH **	ARTS & HUMANITIES ELECTIVE (GH) – ETHICS	3	DEPENDS ON CHOICE	13.	Diversity & Difference	10267***
	Total CORE in Transfer	39		14.	Ethical Issues & Perspectives	
ES 105 and ES 106 **	EARTH SCIENCE (GS) AND EARTH SCIENCE LABORATORY (GL)	4	GEOG 121		SATISFIES PROGRAM REQUIREMENT AT TU MUST TAKE LAB	3086
PHYS 102 OR PHYS 204****	INTRODUCTORY PHYSICS II (GENERAL ELECTIVE) GEN PHYS: VIBRATIONS, WAVES, HEAT, ELECTRICITY & MAGNETISM (GENERAL ELECTIVE)	4	PHYS 212 PHYS 242		SATISFIES REQUIRED COURSE FOR MAJOR AT TU (See Note) SATISFIES REQUIRED COURSE FOR MAJOR AT TU (See Note)	6800 6806
CHEM 112**** ENV 122****	GENERAL CHEMISTRY II (GENERAL ELECTIVE) INTRO TO SOIL SCIENCE (GENERAL ELECTIVE)	4 3	CHEM 132/132L GEOG T19 (319)		SATISFIES REQUIRED COURSE FOR MAJOR AT TU (See Note) SATISFIES ELECTIVE COURSE FOR MAJOR AT TU TRANSFERS AS LOWER LEVEL CREDIT (See Note)	13099/13100 11706
ELECTIVES**** PHED	GENERAL ELECTIVE AS RECOMMENDED BELOW PHYSICAL EDUCATION ELECTIVE	5 1	DEPENDS ON CHOICE DEPENDS ON CHOICE		SEE NOTE	
	Program Requirements at HCC	21				
	Total Program Requirements at HCC	60				
	Maximum Credits in Transfer	64				

64 credit transfer maximum. 3 Core Curriculum units must be completed at Towson University: 9. Advanced Writing Seminar

*Calculus is required for major at TU. Students who require MATH 109 should take MATH 203 as a General Elective at HCC. [Students who do not require pre-calculus are recommended to take ENV 220 (Principles of Environmental Analysis I) or GEOG 204 (Intro to Geographic Information Systems) as a general elective at HCC to satisfy an additional program requirement at TU.]

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****General Education Course Selection:**

- Students should take CHEM 111 and PHYS 101 (or PHYS 203 and PHYS 200) to satisfy Biological and Physical Science General Education electives at HCC and major requirements at TU. Either PHYS 101 or PHYS 203 & 200 will satisfy the major requirement at TU. Please note, however, that PHYS 200 must be taken with PHYS 203 to receive credit for PHYS 241 (and satisfy the major requirement) at TU.
- Students must choose a General Education course as their health elective. Students who choose a health course that does not satisfy a general education requirement at HCC may need an additional Core course at TU.
- Students should take PHIL 205 (Ethics) or PHIL 220 (Bioethics) or PHIL 221 (Business Ethics) to satisfy one of the Arts & Humanities General Education electives at HCC and Core 14 at TU.
- One General Education course must be a diversity course (D) at HCC.
- Students should take ES 105 and ES 106 as their General Education elective to satisfy a major requirement at TU. Please note that both lecture (ES 105) and laboratory (ES 106) must be completed to receive credit for GEOL 121 at TU.

*****Students should take ENG 102 instead of ENG 109 to satisfy Core requirement at TU. ENG 102 satisfies Core Curriculum requirement at TU for students under this agreement ONLY. Requires Course Directive for Core placement.**

*****Note: General Elective Selection:**

- All students should take PHYS 102 and CHEM 112 and ENV 122 as general electives at HCC to satisfy major requirements and a major elective at TU.
- Students who require pre-calculus should take MATH 203 (calculus) as a general elective at HCC to satisfy a major requirement at TU.
- Students who did not require pre-calculus and complete MATH 203 as their General Education Mathematics requirement (GM) should take either ENV 220 (Principles of Environmental Analysis I) or GEOG 204 (Introduction to Geographic Information Systems) as a general elective at HCC to satisfy an additional elective course for the major at TU.

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CORE Requirements to be completed at Towson University (3 units):

Core 9: Advanced Writing Seminar 3

Program Requirements to be completed at Towson University (35-62 units):

Required Geology Courses (26-31 units):

GEOL 123	Historical Geology	4
GEOL 305	Environmental Geology	4
GEOL 321	Structural Geology	4
GEOL 331	Mineralogy	4
GEOL 333	Petrology of Igneous and Metamorphic Rocks	4
GEOL 443	Sedimentology and Stratigraphy	4
GEOL 489	Introduction to Research	1
GEOL 495	Research Problems in Geology	1-2
GEOL121	Physical Geology	4

If student did not complete ES 105 & ES 106 at HCC

Additional Required Courses (0-16 units):

PHYS 211 or General Physics I (non-Calculus based) 4

PHYS 241 General Physics I (Calculus based)

If student did not take PHYS 101 or PHYS 203 & PHYS 200 at HCC

PHYS 212 or General Physics II (non-Calculus based) 4

PHYS 242 General Physics II (Calculus based)

If student did not take PHYS 102 or PHYS 204 at HCC

CHEM 131/L General Chemistry I/Lab 4

If student did not take CHEM 111 at HCC

CHEM 132/L General Chemistry II/ Lab 4

If student did not take CHEM 112 at HCC

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Program Electives

(9 -15 units)

Three additional courses are required. Students must choose from a list of electives (see current TU catalog). Two courses must be Geology courses (GEOL). Students who do not complete ENV 122 and either ENV 220 or GEOG 204 as electives at HCC may require upto five courses, of which two must be Geology courses (GEOL).

TOTAL UNITS TO B.S. Degree	120-125
Harford A.A. Degree	60
Completion of Core Requirements at TU	3
Completion of Program Requirements at TU	35-62
Electives	0-22